LETTERS TO PROGRESS IN PHYSICS

Charles Kenneth Thornhill (1917–2007)

Jeremy Dunning-Davies

Department of Physics, University of Hull, Hull, England
E-mail: J.Dunning-Davies@hull.ac.uk

Dr. Charles Kenneth Thornhill, who died recently, was a proud, gritty Yorkshireman who, throughout his long life, genuinely remained true to himself. This led him into conflicts within the scientific community. The jury is still out on whether he was correct or not in his ideas but, be that as it may, all can learn a tremendous amount from the courage of this man in standing up for what he truly believed.

Dr. Charles Kenneth Thornhill

Dr. Charles Kenneth Thornhill was born in Sheffield on 25th November 1917. To the very end he remained fiercely proud of being a Yorkshireman. Indeed, throughout his life, he faced all problems, both personal and academic, with that gritty fortitude many associate with people from Yorkshire.

His secondary education was undertaken at the King Edward VII School in Sheffield. In 1936 he was awarded an Open (Jodrell) Scholarship for Mathematics at Queen's College, Oxford. This scholarship was worth 110 a year, a considerable amount in those days. He completed his undergraduate studies at the beginning of the Second World War and spent that war devoting his considerable mathematical talent to the aid of the war effort. During the War and in subsequent years, he worked in a variety of fields with a bias towards unsteady gasdynamics. These included external, internal, intermediate and terminal ballistics; heat transfer and erosion in gun-barrels; gasdynamics and effects of explosions; theories of damage; detonation and combustion; thermodynamics of solids and liquids under extreme conditions, etc. As a result of the war work, he was awarded the American Presidential Medal of Freedom. This was an award of which he was, quite properly, inordinately proud. The actual citation was as follows:

> *Mr. C. Kenneth Thornhill, United Kingdom, during the period of active hostilities in World War II, performed meritorious service in the field of scientific research. As a mathematician working in the field of gun erosion, he brought to the United States a comprehensive knowledge of the subject, and working in close co-operation with American scientists concerned with the study of erosion in gun barrels, he aided and stimulated the work in improving the performance of guns.*

After the war, he spent the remainder of his working life working at Fort Halstead for the Ministry of Defence.

Throughout his time at the Ministry of Defence, he had kept abreast of developments in the areas of theoretical physics that fascinated him, — those areas popularly associated with the names relativity and cosmology. One way he achieved this was through his membership of the Royal Astronomical Association. However, on his retirement in 1977 — incidentally, according to him, retirement was the job he recommended to everyone — he was able to devote his time and intellect to considering those deep problems which continue to concern so many. Also, relating to that transitional time, he commented that, up to retirement, he had worked for man but afterwards he had worked for mankind. His main interests were in the physical properties of the ether and the construction of a non-singular ethereal cosmology. Unfortunately, because of his disbelief in relativity, many refused to even listen to his views. One undoubted reason for this was his insistence on referring to the aether by that very name. It is quite likely that if he'd been willing to compromise and use words such as "vacuum" he might have had more success with publication in the better-known journals. However, some journal editors are courageous and genuinely believe in letting the scientific community at large judge the worth of peoples' work.

It is seen immediately that some of these articles make truly substantial contributions to science. Not all are incredibly long but all result from enormous thought and mathematical effort, effort in which Kenneth Thornhill's geometrical knowledge and skill are well to the fore. It is also immedi-

ately clear that here was a man who was prepared to think for himself and not allow himself to be absolutely bound by what appeared in books, whether the books in question be academic tomes or mere popular offerings.

In his life, Kenneth Thornhill was ostracised by many in the scientific establishment as some sort of "enfant terrible". In truth, many of these people really feared his intellect. That is not to say that all his thoughts were correct. The jury should still be out on many of his ideas but, to do that, the members of the jury must have read his offerings and done so with open scientific minds. Kenneth Thornhill left us all a truly enormous legacy and that is that he showed us all that it is vitally important to be true to yourself. He never pandered to the establishment rather he stuck with what he genuinely believed.

Kenneth Thornhill died peacefully on 30th June 2007 and is survived by four children, eight grandchildren and two great grandchildren. To the end he was enormously proud of all fourteen and to them must be extended our heartfelt sympathy. To the scientific community at large must be extended the hope that its members will learn the true meaning of scientific integrity from this gritty Yorkshireman. As one who was privileged to know him, albeit mainly through lengthy, enjoyable telephone conversations, I feel his scientific integrity alone will result in the words:

"Well done, thou good and faithful servant."

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